Creative City 3.0: smart cities for the urban age

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Abstract
In current financial, economical and political crisis, with the progressive downgrading of the States and the world's GDPs dropping, the strong flows of financial, social and relational capital that powered urban regeneration over the last fifteen years are no longer available to be tapped in on in an indiscriminate manner as it seems was the case until just a few years ago. The most dynamic cities in the near future will no longer be those that are able to attract urban projects driven by the real estate market, or hedge funds, but the cities that have extensive cultural and identifying resources and that are able to use them as the basis for creating new culture and new urban value.

Today, within the "smart cities" scenario, the paradigm of the creative city calls for a further evolutive leap forward – the third – because it is capable of producing multiplication and regeneration effects on urban development. The *Creative City 3.0* is therefore no longer simply a category used for interpretation among economists and sociologists or an urban planning challenge, but rather calls on decision-makers to take action and demands a vigorous commitment on the part of town planners and architects, as the development of nations and wellbeing of the community will only be measured according to the cities that tackle the financial global change in a creative manner. The urban century in which we live is not filled by only "hyper cities", but also shows the emergence of medium metropolises and networks of micropolises. Especially in Italy, the network of the "innovative cities" is supporting by middle cities, the "small capitals" that produce alternative visions – founded in quality and powered by culture – to that of the explosion of megalopolises.

One commitment that cannot be put off by governors and managers, planners and designers, promoters and communicators, entrepreneurs and investors, will be that of creating dynamic, vibrant cities that generate new urban values and multipliers of invested capital. These cities must be places people want to live, work, and train in and get to know, productive places that attract investments.

In European vision, the evolution of creative cities towards a network of "smart cities" able to redefine the urban age identity, is founded on three competitive factors: *Culture, Communication,* and *Cooperation.* Inside this evolutive background, with an highly dynamic of change, it has become necessary to understand and evaluate how cities and territories are changing, convinced that it is not only necessary to recognize the role of the "creative agents" in the development of the cities, but also the commitment to this urban creativity being one of the primary factors in the evolution of communities and economic development. The city must once again become a powerful "generator of value" starting with its own spatial, social, cultural and relational resources, able to transform the global network in local resources.

1. New urban scenarios

Reflections on and experimentation with urban creativity as a competitive factor put together in recent years, starting with the works of Florida and Landry, gave rise to further theoretical/operative reflections aimed at providing a deeper territorial dimension to the creative city, lessening the rhetorical character and increasing that of the concrete effects on the quality of life. In 2007 my book *"Creative City: Dynamics, Innovations, Actions"* identified the need for concrete evolution and pointed out the factors that make it possible for urban creativity to become a launch pad for new economies and a creative force for new cities and not simply an attractive force for intellectual resources and talents. Today the paradigm of the creative city calls for a further evolutive leap forward – the third – because it have to be capable of producing multiplication effects on urban regeneration and development.

In current crisis scenario, with the world's GDPs dropping, the risk of State *default* and an insurgent economical *tsunami*, revitalizing cities by big urban projects is no longer easy opportunity for long-term investments or for using the financial capital gains of multinationals or sovereign funds. The new creative city has to provide precious opportunities for real development – not only quantitative but more and more qualitative – that is able to produce effects in both the domain of collective assets and that of economic and social capitals. The most dynamic cities in the near future will no longer be those that are able to attract urban projects driven by the real estate market, but the cities that have wide innovative and heritage-based cultural resources and that are able to use them as the basis for creating new visions, renewed new urban values. We need to re-imagine the capitalism starting by the urban capital.

The *Creative City 3.0* is therefore no longer simply a category used for interpretation among economists and sociologists or an urban planning challenge, but rather calls on decision-makers to take action and demands a vigorous commitment on the part of town planners and architects, as the development of nations and wellbeing of the community will only be measured according to the cities that tackle the financial global change in a creative manner. The urban century in which we live is not filled by only hyper-cities, but also shows the emergence of medium-size metropolises, widespread conurbations and networks of micropolises - especially in Italy. The network of the "global cities" is supported by middle cities: the "smart capitals" that produce alternative visions – founded on identity, designed by quality and powered by culture – to that of the explosion of megalopolises.

One commitment that cannot be put off by governors and managers, planners and designers, promoters and communicators, entrepreneurs and investors, will be that of creating dynamic, vibrant cities that generate new urban values and multipliers of invested capital. Cities able to be places people want to live, work, educate and train in and get to know, productive places that attract investments.

The "Era of Knowledge" asks for the ambitions of men and women, the desires of the young generations and their tensions, the motivation of the productive class, the imagination of the creative class, and knowledge-related activities as new structural factors in constructing development. However, the city is not merely the sub-stratum of a settlement, but in itself it promotes the creation of places of creativity, which produce urban quality more and more. A number of cities are engaged in a process of creative self-stimulation (favoring the location of creative activities that consolidate the creativity of places in the city) consciously and with great determination, putting themselves forward as powerful "multipliers" of invested values.

In the "smart and creative city scenario" we must aid the passage from cities that attract the creative class to cities that generate creativity, innovation, new morphologies, relationships and economies. But we have to take in balance some risks towards the un-sustainability of the goal. Placing an international world attractor linked to global network brings with it the risk of uprooting a part of the city from its local context and projecting it directly onto the world network, bricking the relation between heritage and identity. Suitable lines of action must therefore be defined so that development factors brought into play by the presence of innovation clusters are not only in line with the identity and model for sustainable growth of the city, but in fact feed this process bringing the entire city into the global network of creative cities.
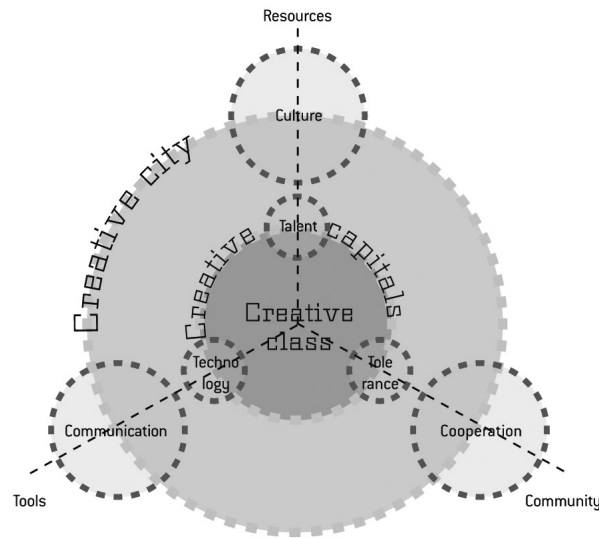
Figure 1 – Creative city factors and creative capitals.

Accessibility, relationality, experience, connectivity and multiplicity are keywords for new urban dynamics: the Italian *Creative City 3.0* no longer only configures itself by means of the traditional categories of sectoriality, property, and materiality. In the new post-Fordism evolution of the creative city the new competitive factors, especially for Italian vision, are *Culture, Communication,* and *Cooperation.*

In Europe, and in Italy above all, **Culture** is the primary factor of urban creativity, a resource that puts down roots in the palimpsest of the history of the cities and stretches it branches out to the future. The culture of Italian cities comprises places and people, heritages as well as civic identity, and constitutes their DNA, their distinctive character that is able to withstand the temptations of a standardized globalization. The cultural identity of a city therefore constitutes its "talent", its distinctive and competitive resource, its value to bring into play, its excellence produced by history and passed on to evolution. Cultural resources do not therefore stop at cutting across the immaterial webs of heritage, art or training, they are not satisfied with launching temporary events and exhibitions, but that take concrete action in places and on the occasions of meeting for the community and consolidate their action in cultural services and centers (theatres, concert halls, media stores, archaeological parks, museums and galleries, auditoriums and libraries, as well as cafes, cultural associations, etc.). A more cultural-based development aims to constitute cultural districts as an innovative engine factor for urban regeneration.

The second factor in urban creativity is **Communication**, that is, the city's capacity to inform, divulge, and involve in real-time its inhabitants and, more and more, its multiplicity of users that pass through it, permeate it, and connect it with other places. The city has always been a powerful communication tool, and its communicative function is one of the most potent factors of creativity because it makes it possible to improve the milieu within act the transformation actors, orienting resources and players towards common objectives. In addition, urban communication facilitates participation and consolidates groupings, contributes towards reducing conflict and facilitating strategies and collaboration.

Finally, the third factor is **Cooperation**, seen as an active form of participation, a new dimension in the planning of the urban melting pot. In global and multicultural cities we can no longer be satisfied with tolerance, taken to mean simply accepting the existence of other cultures and other ethnic groups, but that remain cut off from the vital flow of the city. The challenge facing creative cities lies instead in cooperating in integrating the differences in the evolutive process, in the common pull towards collaboration of the various cultures in the plan

for the future. New lifestyles arise and develop in Italian cities, resulting in remodeling of central and peripheral areas, redefining their parts from a multi-center, multi-identity point of view. A creative city is not merely an open, multicultural and multi-ethnic city, but it is a city that is able to mobilize its diversity towards the new plan for the city, activating forums and creating "proximity and exchange places" where discussion and a collective vision can be facilitated, locating new multicultural centrality.

In this vibrant background, with this dynamic of change it has become necessary to understand how cities as territorial knots of a wide network are changing, convinced that it is not only necessary to recognize the role of the "creative agents" in the development of the cities, but also the commitment to this urban creativity being one of the primary factors in the evolution of communities and economic development. The city must once again become a "generator of value" starting with its own spatial, social, cultural, and relational resources.

2. Creativity as smart planning strategies for Italian cities

The challenge for Italian creative city project is clear: going from being a passive city that "attracts" the creative class to a creative city that "produces" a new identity, new economies, and new geography of places. There needs to be a passage from a vision of an essentially financial creative city in which creative people attract investments in a planning vision in which creativity generates new morphologies and productive and innovative urban activities.

In getting away from a simplistic vision in which creativity has only a rhetoric use, the question must be asked whether all cities can make effective use of the factors of urban creativity, whether all can strive to be a key point in the city network of innovation that interlinks the planet. Only a thorough identification and evaluation of the presence of the creative milieu can it become possible to activate resources, using the "urban genetic code" to generate a more innovative city. What is needed therefore is to "activate a creative city" using strategies, policies and projects that can interact, multiplying the effects and producing dynamism, innovation and urban transformation? Seven strategic axes can be identified that have to be followed so that creativity can transform itself into a necessary "multiplier" of resources.

First and foremost a **trans-scale approach** must be adopted, combining a holistic, complex approach with an operating approach that is able to select the most effective tools for obtaining concrete results. The adoption of strategic plans integrated with urban projects is one of the solutions that is producing results that are of greater interest. Even where creativity has had to deal with the crisis generated by the shutting down of key activities, it has produced its best results when it has been used as a tool within processes with a larger scope. In recent years Turin, for example, has completed the process of changing from a company town to a culture city, looking again at its position in terms of culture, design, and technological research and taking steps towards new industrial competitiveness and international openness. In the strategic plan for Turin International, knowledge and culture become the lynch pins of the new "immaterial economy" that the city sees as a competitive factor within the network of European metropolitan cities.

Secondly, a creative city must activate its function as a **territorial switch** intercepting the energies of flows, people, and know-how and of more selective financial capitals that cross the planet and transform them into local resources. In the current period of crisis, faced with a reduction in flows, strengthening the switching function of the cities must be brought about more and more by establishing solid agreements, strategic accords, and sound processes of "co-planning". In Bologna, for example, the Fair project sprung up around the great "gateway" formed by the new TGV railway station, with the intention of transforming the city into an international business center and new focal point for the global economy, intercepting the flows of the network economy.

Due to their intrinsic culture-based identity, creative cities must guarantee **a balance between conserving cultural and social heritage and promoting innovation**, by using "interpretation plans" and "structural plans" to direct competitiveness towards sustainability. Genova and

Bologna, for example, chose as one of the key elements in their role as European Cultural Capital the interaction between technological-economic creativity and artistic-cultural one. The urban renewal realized in those occasions reinforced the city's quality as a multi-dimensional place that is able to offer creative stimuli and exchanges that can act as *milieu innovateur* for companies and inhabitants, stimulating talent and promoting initiatives resulting from this talent. Tradition, innovation, and inclusion were used as factors for interpreting the port area in order to create new excellence based on cultural policies and *loisir* that form the indicators for guiding the numerous redevelopment plans. Some cities aim to be a smart-city able to experience the use of technological innovation in order to extend the principle of "adaptability", seen as a tool for feeding the new ways of using the city (i.e. Trieste).

Creativity's fourth axis involves providing incentives for **genre or generational policies** (children's city, actions for working women, protected spaces for the aged, etc.) that are able to reduce social conflict and generate the necessary sense of cooperation increasing, for example, the use of times and timetables, as well as community planning processes that go beyond pure rhetoric of participation to implement new lifestyles.

Planning solutions must feed **urban, cultural, social, ethnic, and functional diversity** in a rich mixture of languages, customs, and lifestyles that go beyond plans that mimic the "archi-stars" and rather produce creative solutions fed by "local talent" rather than that of the planners. The urban centers and community ateliers play a fundamental role, as does the linking the urban plan to the training and research system that must take on the city's "creative agent" role more and more.

The sixth axis relates to promoting **multi-player and multi-level decision-making processes** (multi-level governance) that are able to be both rational, organizing material resources, and instinctive, mobilizing human and relational resources. These processes are capable of integrating competitiveness and social cohesion by balancing the operational aspect of the "Mayor's Plan" with the cooperation of the local SMEs.

Finally, the last axis of the urban creativity project demands that transformations come about by enhancing **cooperation**, integrating the various social communities within the city in the processes of valorizing a real strategic and cooperative process, while also putting together action viewpoints and sectors that are normally separated. In fact, creativity is a powerful tool for revitalizing the "urban metabolism" in which the cities' inputs and outputs find a new balance between energy efficiency and environmental quality. Environmental sustainability and renewable energy are the component parts of the creative way of developing some cities for experimenting with innovative urban planning methods fed by the green urbanism.

3. Activating urban creativity to regenerate sustainable cities

In recent years Creativity Group Europe has analyzed the main Italian cities, by developing an index (*Italian Creativity Index*) that demonstrates the ability of cities to generate "urban creativity" and give a strong boost to their dynamism, competitiveness and cohesion. The ICI has a merely descriptive and interpretive role, and its purpose is simply to synthesize multiple measures into one single figure that gives a snapshot of every city. But few general insights emerged from the synthetic index:

the highest scores correspond to the largest cities (Roma, Milano, Bologna, Firenze, etc.), which are better able than smaller ones to balance each of the 3 Ts and have good performances on all of them;

yet, we can also observe a good competitive edge from medium-sized cities, although they appear to have a lower balance between the three Ts (Genova). In general, the medium cities that are at the top of the ranking owe their positioning to rather tolerant and open environments (Torino), and in some cases, also to a strong and quite innovative industrial context (like Modena, Parma, and Padova);

there still exists a significant northern/southern divide within Italy. In particular, southern cities show major weaknesses in their technological capability as well as in their cultural

environments, which appear very traditional and still far from open as is the case within most multicultural societies;

however, many traditional industrial cities in the north-east also seem to struggle in the creation of creative economies and societies (like Rovigo, Cuneo, and Vercelli) where the traditional economic structure is accompanied by a similarly traditional social structure.

The index, however, does not take account of real creative cities in Italy, it shows the state of the art and not the trend and the ambitions. Especially do not take into account that the presence and attractiveness of the creative class is an important factor, but others are the parameters with which to measure the "creative dynamism".

A more detailed analysis of the Italian cities shows instead that there are many urban project in progress and best practices that draw the scene of an Italy of the city acting with courage by the new generation of creative cities, the 3.0. A generation of creative cities that invest in urban renewal projects, which enhance the role of "gateway cities" that are able to create value by making the system of cultural excellence.

ICI Position	Province	Italian Creativity Index (ICI)	Talent (rank)	Technology (rank)	Tolerance (rank)	ICI Position	Province	Italian Creativity Index (ICI)	Talent (rank)	Technology (rank)	Tolerance (rank)
1	Roma	0.786	1	4	1	53	Bari	0.301	42	29	67
2	Milano	0.720	5	1	2	54	Pordenone	0.291	82	26	57
3	Bologna	0.665	4	2	4	55	Cremona	0.290	79	62	38
4	Trieste	0.602	2	8	9	56	Aosta	0.284	81	35	59
5	Firenze	0.585	6	6	3	57	Mantova	0.283	89	49	43
6	Genova	0.555	3	7	20	58	Messina	0.280	14	58	86
7	Torino	0.518	19	3	17	59	Latina	0.279	76	32	66
8	Parma	0.516	11	8	6	60	Teramo	0.273	49	75	58
9	Rimini	0.489	21	12	5	61	Sassari	0.271	36	64	71
10	Perugia	0.477	12	19	10	62	Rieti	0.267	72	61	60
11	Modena	0.468	58	5	12	63	Bergamo	0.262	94	92	24
12	Padova	0.466	15	10	19	64	Trapani	0.256	63	29	79
13	Pisa	0.463	9	34	14	65	Cosenza	0.255	18	81	78
14	Reggio E.	0.413	78	13	11	66	Salerno	0.253	23	80	77
15	Ravenna	0.407	57	14	21	67	Lecco	0.251	70	88	51
16	Terni	0.406	17	40	28	68	Biella	0.249	97	77	36
17	Verona	0.403	75	18	13	69	Ascoli P.	0.247	47	76	70
18	Siena	0.398	15	73	16	70	Reggio C.	0.245	22	59	96
19	Piacenza	0.395	38	21	25	71	Como	0.242	68	96	52
20	Pesaro-U.	0.392	29	43	23	71	Lecce	0.242	60	72	69
20	Pescara	0.392	7	41	56	73	Belluno	0.231	87	23	81
22	Prato	0.391	72	17	18	74	Sondrio	0.230	92	82	48
23	Imperia	0.384	51	44	15	75	Asti	0.228	98	83	40
24	Forlì-C.	0.375	59	19	29	76	Catanzaro	0.225	26	79	85
25	Savona	0.372	25	33	39	77	Ragusa	0.219	89	44	76
26	Bolzano	0.368	80	56	7	78	Viterbo	0.218	85	85	63
27	Varese	0.365	53	51	22	79	Siracusa	0.217	49	55	90
27	Brescia	0.365	87	46	8	80	Verbano	0.216	95	93	44
27	Ancona	0.365	24	35	46	81	Matera	0.213	30	71	95
30	Treviso	0.364	69	21	27	82	Caltaniss.	0.212	86	57	75
31	Venzia	0.363	53	16	41	83	Caserta	0.210	39	73	89
32	Lucca	0.362	40	53	26	84	Chieti	0.207	52	86	80
33	Catania	0.361	20	50	45	85	Lodi	0.204	91	86	64
34	Napoli	0.357	8	29	68	86	Vercelli	0.202	99	84	54
35	Vicenza	0.353	84	11	34	87	Cuneo	0.198	101	90	50
36	Livorno	0.351	34	15	61	88	Frosinone	0.190	83	67	84
37	Arezzo	0.350	48	42	33	89	Taranto	0.184	96	48	87
38	Macerata	0.342	45	24	49	90	Enna	0.178	71	103	74
39	Trento	0.341	27	69	35	91	Campob.	0.176	44	91	92
40	Grosseto	0.336	63	54	30	92	Isernia	0.174	32	101	97
40	L'Aquila	0.336	10	60	65	93	Avellino	0.171	35	94	99
42	Gorizia	0.329	41	39	53	94	Vibo V.	0.170	46	97	91
43	Ferrara	0.327	56	37	47	95	Crotone	0.167	62	98	88
44	Pistoia	0.325	77	52	31	96	Agrigento	0.163	60	89	98
45	La Spezia	0.320	31	46	62	97	Foggia	0.159	72	70	102
46	Udine	0.320	55	27	55	98	Rovigo	0.152	103	66	82
47	Palermo	0.312	13	28	83	99	Benevento	0.150	43	98	103
48	Novara	0.311	67	67	32	100	Brindisi	0.139	100	62	93
49	Massa C.	0.306	32	24	73	101	Potenza	0.135	66	100	100
50	Alessandria	0.305	65	65	37	102	Nuoro	0.094	93	101	101
50	Pavia	0.305	36	78	42	103	Oristano	0.092	102	94	94
52	Cagliari	0.302	27	38	72						

Table 1 – The Italian Creativity Index computed by Creativity Group Europe (2006).

A planning-based approach, therefore, when it comes to creative cities demands that one does not stop at identifying the role of the creative class or the characteristics of the *creative milieu*, but that goes on to recreate the contextual aspects and local declinations that are useful for extracting the good practices to be used as methods or for being transformed into components for making new urban revitalization and development tools.

Creativity as planning tool may be able to reactivate the urban metabolism of Italian cities, giving rise to new energy.

Therefore, in addition to regenerate spatial quality, the areas of urban transformation seek to become real "creative clusters" in which, starting with pre-existing activities, economic, social and infrastructural initiatives make it possible to generate innovative projects, implemented as part of adequate planning strategies for local development based on the "soft economy" produced by territorial qualities and local areas of excellence. Specifically in times of financial crisis and economic recession, investments in creativity can be more effective, losing some connotations that are too immaterial or purely speculative and acquiring the soundness of the effects on the local socio-economic system. An effective policy for developing creative urban clusters can be broken down into three levels that interact with one another.

Policies aimed at strengthening the competitiveness of the cluster form the first level, and this involves adopting grading and development strategies that are able to valorize the city's potential and to facilitate integration with the metropolitan dimension. This objective takes the form of extending local infrastructures, especially those for transport and communication, focusing mainly on the connection hubs for large transport networks (ports and airports), as well as by developing the services offered to companies, especially innovative services with high added value, which facilitate networking. The importance of extending the human resource assets and level of skill and professionalism available must not be overlooked, with training and research actions being taken and interaction being facilitated between players within the cluster as well as inter-cluster, besides extending to the setting up of intermediaries (agencies, mixed companies, advisors, etc.).

The second level relates to the **policies for distributing the effects** of the creative cluster to the entire city, aimed mainly at active works for sustainable development, based not only on reducing the environmental and energy impact, but also at stimulating the social responsibility of companies, incentivizing monetary compensation and redirection of some of the profits into working on urban quality. The centrality policies must go hand in hand with rationalization of the location of activities and companies within the cluster in order to redesign flows and restore the centrality balance, thereby avoiding the risk of congestion caused by a new demand for land and services.

Finally, transferring the effects of the success of the cluster must be activated by means of actions to communicate and valorize the city's image in order to increase its "brand value" and credibility and the resulting attraction for investments, population, and users, also including flagship projects used as accreditation elements.

For all of these large-scale works we do not yet know how the deadlines will be affected by the global economic crisis and completion of which parts will be put off until better times return. However, there is no doubt that, at times of anti-crisis action in terms of infrastructure and building, a city having specific far-reaching, coherent strategies and plans facilitates focusing public resources where there is already private interest, so as not to lose the initial investments.

Actions to reduce the negative effects of development of the creative cluster constitute the third level, and involve tackling the dynamics of the real estate market to avoid *gentrification* phenomena and to keep building speculation under control, especially where there are not compensation policies (rent controls, social building reserves, tax incentives, etc.).

The improvement of urban transport conditions and the connections to global network by planning infrastructures and transport systems also makes an active contribution to avoiding aggravating congestion, in part by upgrading the use of various modes of transport. These objectives are developed by a network of "50 Innovative Cities", selected by the Ministry of Infrastructure, that are designed leading the creative city principles the relationship between port, station and human settlements, considering themselves as dynamic knots of an urban armature.

Finally, action must be taken to improve the offer of qualified work and assistance to the local job market in order to assist with the transformation towards creative industry sectors, with strong links to the training and professional system.

The intensity and proximity of the relations between institutional subjects and those with interests that are at work in the cluster is a factor in its success, which calls for adequate venues and conditions that facilitate such occasions occurring. In this sense, the development of nearby,

related venues and the promotion of cultural, sporting, or entertainment events, are important conditions for reinforcing the social capital among the players that make up the district. The intersection between creativity factors and their urban effects shows us a useful trends index to identify the rising Italian creative cities.

City	Creativity factors			Creativity effects			
	culture	communication	cooperation	Technology innovation	Environment sustainability	Social cohesion	Quality of life
Bologna	●	●		○		○	
Cagliari		●	●		○		○
Catania	●	●		○		○	
Ferrara		●	●		○		○
Genova	●		●		○	○	
Milano	●		●	○			
Palermo		●	●	○	○	○	
Parma	●		●				○
Perugia	●		●				○
Pescara		●	●			○	
Pisa		●	●	○			
Rimini		●	●				○
Roma	●		●	○			○
Siena	●	●		○			○
Torino	●		●				○
Trieste	●	●				○	○

Table 2 – Creativity factors and creativity effects in principal Italian cities (2009).

3.1 Creative planning process of a gateway-city: Palermo

In Italy urban waterfronts planning is one of the most prolific field of action for creative cities: multiple, dense and hybrid places where the resources, opportunities, aspirations and ambitions of cities are translated into visions, new relations and designs. The creative gateway-city is capable of generating new urban forms, of producing new landscapes and through the permanent flow of urban culture, of fuelling the great relational networks, making them more dynamic, communicative and competitive. The most important implication of waterfront regeneration is that this particular area should be addressed as a structural element of the city as a whole.

Palermo, learning from Urban Initiative experience, has set its sights on becoming a *Gateway City* of the Mediterranean area: a metropolitan hub within the European urban framework, capable of intercepting the flows – material and immaterial – of long distance networks and transforming them into interests, investments, production and localization, feeding the city's development and innovation as part of a new strategy focusing on recentralization within the Mediterranean Union.

A key location in the strategy is the waterfront regeneration: the first "swing power" for generate the new creative city. The Central Waterfront offers itself as a pilot project on both to connect the gateway area to historic center and to offer the opportunities of cultural heritage to port area regeneration. The Central Waterfront, tightly inter-linked with the historic center, must be viewed as one of the city's most fertile areas of urban creativity, where strategies, plans, services and businesses come together in the name of quality and productivity. The waterfront does not merely imply a new port but also a new city: a *fluid city* intertwined with a *city of stone,* an *innovative city* intertwined with a *heritage city*.

Starting with the vision of the Strategic Plan, the Central Waterfront has been identified as one of the twelve "Integrated Transformation Areas", guided by a well-defined strategy organized into two operative fronts: the first addressing improvements to port functions and the other planning a city-port in the form of a "creative city", capable of generating new potential and renewed urban economies, providing the city with new spaces but also, and more importantly, new modes of being and lifestyles. The waterfront will become the new "City of Exchange and

Innovation", where port functions are integrated with large-scale urban services and new neighborhood housing and services will create a dynamic city effect along the seafront.

The Waterfront Masterplan puts into action an integrated strategy of infrastructural improvement, urban optimization and competitive development, acting primarily on the urban "junctions" between city and port, a structural plan for the section of the city interfacing with the sea. The powerhouse behind the Masterplan is the "Officina del Porto" set up by the Port Authority and the Municipality of Palermo in 2006 (directed by Flavio Albanese and Maurizio Carta): an innovative atelier for analyzing, interpreting, planning and communicating the waterfront regeneration.

The Masterplan proposes three waterfront variants, two of which are strictly urban: the *fluid port* associated with sailing, cultural and free time facilities and accommodation, as well as new housing connecting the city with the *porous port*, namely an area for cruise-ships and passengers, enjoying close ties with the city and transport system, including facilities and buildings along the wharf to encourage the opening of the urban front onto the sea. The third variant foresees a *rigid port*, inaccessible to the public and thus enabling the harbor to work to full capacity. In Palermo the richness of ambiguities and the force of complexities of waterfront area will condense and intertwine, presenting itself as powerful resource to engine the project for "fluid city" regeneration.

4. Conclusion

The analysis of the Italian context – and the experiments in progress – also pointed out some peculiarities that are worth mentioning as they have important implications for new policy design and implementation. A first one is the existence, in many cities, of a gap between creative factors and other measures of development. For example, there are cities with good performances on scientific talent but with low levels of creative class, and cities that, instead, have good levels of creative factors that are not accompanied by similar good levels of human and/or scientific capital or adequate urban policies (like Naples, Palermo, or Catania).

Such a gap characterizes various Italian cities and is probably related to two main features: a) the presence of strong public research institutions loosely related to the productive structure of a city/area (this could be the case of some important "university towns" such as Padova or Trento); b) the high diffusion of small firms with low technological innovativeness might lead to, in certain cases, high levels of creative class (which includes entrepreneurs and managers) without affecting significantly the level of overall human capital and/or scientific talent.

In the passage from cities that attract the creative class to creative cities that generate new urban effects, the presence of an international district linked to global network brings with it the risk of uprooting a part of the city from its local context and projecting it directly onto the world network. Suitable lines of action must therefore be defined so that development factors brought into play by the presence of clusters are not only in line with the identity and model for sustainable growth of the city, but in fact feed this process bringing the entire city into the global network of creative cities.

Creative city, economy of experience, strategic planning, and good governance are new watchwords for guiding the processes of developing smart cities, but at the same time they must constitute resources and procedures for new city planning and design.

To paraphrase Antoine de Saint-Exupéry: a smart city must be built, not by gathering people to collect stones and sharing out tasks and not using gold to buy the crew, but by transmitting the powerful and sustainable energy of creativity to them.

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